

THE PLANETARY PHASE

If we lived in a 'business-as-usual' world of stable social structures and incremental change, limning the long-range outlook for higher education (HE) would be a relatively tractable exercise. It would be enough to identify the driving factors now influencing the evolution of HE institutions, assess the ways such institutions respond, and project these trends over the time horizon of interest. The analysis would yield a rather narrow envelope of future scenarios, all bearing a strong family resemblance to the present.

Instead, we confront a world moving through a period of great turbulence and uncertainty, where unprecedented challenges and intertwined perils leave the fundamental shape of the future open and contested. In these singular times, circuits of almost everything – goods, currency, people, ideas, conflict, pathogens, effluvia – spiral around the planet faster and thicker in a blur of economic, technological, cultural, and environmental change. In binding an increasingly integrated global system, these multiple entanglements announce a new historical epoch: the Planetary Phase of Civilization (Raskin et al., 2002).

In this emerging reality, pathways for global-scale macrodynamics to impinge on sub-global components proliferate. Climate change alters local hydrology, ecosystems and weather. The worldwide web plugs individuals into an intercontinental pulse, and, penetrating remote villages and outposts, unsettles traditional values and cultures. Supranational mechanisms of governance challenge the prerogatives of sovereign states. Economic globalization drives, and sometimes disrupts, national and regional markets. The global poor, inundated with images of affluence, demand justice and seek access to wealthy countries, while despair and anger feed the globalization of terrorism. Most profoundly, the awareness of being part of an interdependent world system gradually spreads in human consciousness.

The global system and its components shape one another in a complex and reciprocal dance that changes the whole, which in turn changes the parts. This is the dynamic

of transition. Until now, the world could be reasonably approximated as a set of separate, interacting entities – independent states, autonomous ecosystems and distinct cultures. Such partitioning has become inaccurate and misleading. The bromide 'the whole is more than the sum of its parts' takes on fresh and literal meaning: something is fundamentally new on the face of the Earth.

As a planetary socio-ecological system crystallizes, the world-as-a-whole becomes a primary domain of social evolution and environmental transformation, and arena for contending forms of consciousness. The erosion of geographic and cultural boundaries brings people and places into a transboundary space of interaction that engenders new forms of affiliation and conflict. This larger enmeshment does not abolish communities and nations, which endure as vital loci of political and cultural identity. Rather, it forms as an outer encircling, a de facto global place (if not yet a de jure political community), the site of great cultural and political struggles to come.

BRANCHING FUTURES

The civilization we race toward could be very different from the one we leave behind. The road taken will depend in good measure on the way two key unknowns play out in the coming years: the form and intensity assumed by social and environmental crises now germinating, and the collective human choices made along the way in responding to the threats and opportunities of the Planetary Phase (Raskin, 2008). With so much uncertainty, any robust consideration of the outlook for HE institutions must first envision the range of 21st-century worlds they might plausibly inhabit.

Taking a wide panorama on the possibilities, we must transcend gradual evolutionary scenarios to include, as well, transformative development trajectories that track possible ruptures in structural continuity. Trend projections are useful for identifying critical uncertainties and unsustainable trends, but occlude vision and truncate awareness. Dystopian visions face the dire risks of inaction or unwelcome surprise, but foster only a self-fulfilling Zeitgeist of despair and fatalism. Hopeful

scenarios of fundamental shifts toward a just and sustainability civilization, though they may seem improbable, in fact serve to expand the terrain of the possible by stimulating the imagination and social discourse.

Picture, then, three broad channels radiating into the imagined future: worlds of incremental adjustment, worlds of catastrophic discontinuity, and worlds of progressive transformation. We refer to this archetypal triad – evolution, decline, and progression – as *Conventional Worlds*, *Barbarization*, and *Great Transitions*.¹

In *Conventional Worlds*, the prevailing dynamics of globalization persist in the forthcoming decades. Episodic setbacks notwithstanding, economic interdependence deepens as developing countries converge toward rich-country cultural norms and patterns of production and consumption. In the *Market Forces* variant, powerful global actors advance the priority of free markets, relying heavily on price signals and spontaneous innovation to reconcile economic growth with ecological limits. In the *Policy Reform* variant, governments are able to establish a globally coordinated portfolio of sustainability initiatives to reverse environmental degradation and dampen social friction.

Barbarization scenarios explore the real risk of the market and policy adjustments assumed in *Conventional Worlds* being overwhelmed by deepening environmental and social stress. As a general crisis mounts and civilized norms erode, world development takes a venal turn. In the *Fortress Worlds* variant, a powerful international coalition acts to impose an authoritarian world order: elites retreat to protected enclaves with an impoverished majority outside. In *Breakdown* versions, chaos spirals out of control and institutions collapse.

Great Transition scenarios, the central focus of this inquiry, also assume the inadequacy of *Conventional Worlds* solutions, but envision instead the eventual emergence of a development paradigm rooted in revised values and restructured institutions consonant with the opportunities of the Planetary Phase. In these narratives, deepening planetary interdependence fosters a corresponding enlargement of consciousness – global

citizenship, humanity's place in the wider community of life, and the well-being of future generations. The ascendant sensibility of cosmopolitanism, quality of life, and respect for nature displace the modernist value triad of individualism, materialism, and domination. Effective and democratic global governance structures balance pluralism and unity in a cooperative search for a sustainable and humanistic civilization.

The world today, an admixture of all these contradictory tendencies, faces a branching web of possibilities. All our scenarios are problematic. Muddling forward in *Market Forces* mode, we risk crossing critical thresholds of socio-ecological instability. The predicate of *Policy Reform* – sustained, globally coordinated political will for sustainability and poverty alleviation – is nowhere in sight, undermined by myopic national agendas and public attitudes. Establishing the authoritarian world order of a *Fortress World* would require a coherent response of elite institutions in the face of chaos and resistance, while *Breakdown* would enact on a global stage the wholesale collapse visited upon regional civilizations of the past. The alternative to all these scenarios, the deep transformation of *Great Transitions*, would take a vast cultural and political rising of global citizens, a development far from guaranteed.

HE PROGNOSIS DUBIOUS

Each tale of the global future weaves corresponding subplots for places and groups. The unfolding Planetary Phase moulds all within its realm, as people and institutions, in turn, influence the overarching story. As a significant protagonist in this unscripted drama, HE will influence the outcome, either passively, by adapting to and reinforcing its dominant themes, or actively, by moving to centre stage with vision and commitment to help shape the narrative arc (Escrigas and Lobera, 2009).

The previous 'great transformation' from the feudal to the modern era offers an instructive antecedent (Polanyi, 1944). Modernity churned all the old social institutions and reconstituted them in a form coherent with the imperatives of the ascendant order. The university, of course, was no exception, though its hierarchical and rigid medieval

structures long resisted change. By the 19th century, though, more flexible institutions were established, attuned to the democratic and entrepreneurial impulses of the time. Educational purpose shifted from training the few in the received arts of law, theology, and medicine to a mission more consonant with the rising industrial order: training the many for a rapidly changing economy, conducting basic research, and promoting innovation (Altbach, 2008).

Suitably transformed, HE institutions became essential for the continued spread and deepening of the project of modernity over the past two centuries. In the *Market Forces* scenario, this role would persist (so long as the scenario itself remained viable), as HE would continue to struggle to accommodate its practices to the exigencies of deregulation, privatization and corporate-driven globalization (Slaughter and Rhoades, 2004; Nayar, 2008). In this context, emphasis would further shift from the classical liberal arts education to applied science, business and economics. General research funding would face more stringent cost-effectiveness tests, while applied research would centre on commercially viable technological innovation and market-based social policies. Persistent budget gaps, as increasing student enrolment demand outpaces stagnant public funding, would reinforce trends toward entrepreneurial research and career-oriented curricula. Many conventional HE institutions with untenable business models would perish, while the market share of a new breed of for-profit training companies would expand.

The intensive governmental sustainability efforts in *Policy Reform* alter this picture in significant ways. Basic research would tilt toward ascendant pursuits matched to the complexity and uncertainty of the challenge, such as integrated modelling, ecological economics, and global change science. Applied research would highlight appropriate technology, ecosystem restoration, poverty alleviation, industrial ecology, and negotiations, diplomacy, and institutions for governing an interdependent world. As career opportunities proliferated, universities would respond with new curricula to prepare a growing cadre of sustainability professionals. In this

scenario, the impact on HE of the 'sustainability race' could well rival that of the Space Race a half century ago.

By contrast, were a systemic global crisis to usher in an age of *Barbarization*, darkness would descend across HE, as well. In a *Fortress World*, elite universities would no doubt endure, reinventing themselves as citadels of privilege, not socially remote medieval ivory towers, but relevant agents of a repressive order. The logic of survival would dictate harsh suppression of surviving pockets of resistance from within these institutions. In many ways, the heart of the humanistic tradition and democratic mission of HE would be sacrificed on the altar of expediency. If this polarized world were swept toward the chaos of *Breakdown*, remnants of desiccated HE might survive, refugia where the long march back to civilization might begin anew.

In all these contrasting stories, HE serves as a dependent variable in the calculus of the future. Carried along by tides of change, it adapts to altered conditions – good, bad, and ugly – assuming the coloration of the dominant social formation and adjusting its internal logic to prevailing rationality. By contrast, the very plausibility of *Great Transitions* depends to a significant degree on whether HE assumes a forceful and proactive role in advancing the necessary shift in culture and knowledge.

TRANSITION POSSIBLE

Visualizing a culture of expanded solidarity emerging from our world, racked by conflict and blinded by denial, stretches the critical imagination. Still, as the Planetary Phase interconnects people and biosphere in a single community of fate, it nurtures worldviews more cosmopolitan and ecological, at least in a growing subculture. The age-old dream of an organic planetary civilization has become, for the first time, anchored in the objective conditions of history. The globalizing human project becomes the locus of common dangers and nascent dreams. Indeed, the integral Earth grounds the imagined global community more firmly than the arbitrary boundaries of imagined national communities.

Supranational awareness and commitment promise to rise further in the times ahead, but at what pace and to what degree? Can

planetary consciousness and a global polity develop fast and broad enough to deflect a world system now rumbling with great momentum down a dangerous path? Social observers have long noted that changes in the hard culture of the techno-economy tend to outpace adjustments in the soft culture of values and behaviours (Ogburn, 1922). Old ways of thinking and acting have always clung like 'a nightmare on the brains of the living', to borrow Marx's memorable phrase.

The disjuncture of hard and soft culture today has widened to an unstable chasm between 21st-century conditions and 21st-century mind-sets. As old ideas lose their efficacy and sway, the opportunity opens for rapid and fundamental change in ways of thinking and organizing society. Yet, the major actors now dominating the world stage – intergovernmental bodies, transnational corporations, and global civil society – are problematic for the task of aligning cultures and institutions with the desiderata of global sustainability and justice. State-centric geopolitics enfeebles the United Nations system. Myopic corporate and financial institutions advance interests at odds with the long-term common good. Civil society activism, enfeebled by fragmented politics and lack of a shared vision, can at best moderate the worst trepidations of the *Market Forces* juggernaut.

A vast, coherent movement of engaged global citizens, the only social force arguably matched to the scale and complexity of a *Great Transition*, remains latent in the global field (Raskin, 2009). Global citizenship carries affective, as well as institutional meanings. People become global citizens to the degree their concerns and identity extend to the human family and the biosphere. This enlarged sense of moral and political community is spreading among a growing band of 'citizen pilgrims' (Falk, 1992). Ultimately, however, the full manifestation of global citizenship awaits the formation of effective institutions of democratic global governance.

Still, the precursors of a historically consequential 'global citizens movement' are ubiquitous: in the ongoing actions of countless civic groups working for sustainability, justice, and peace; in the transnational communities fostered by information technology; in the deepening scientific understanding of

the dynamics of the Earth system; and in the awareness of interdependence that spreads with each new crisis that ripples across the globe. If the global citizens movement may be ready to be born, then seeking to give it life stands as both opportunity and responsibility for all concerned with the quality of the future.

In this quest, HE has a leading role in the domains of *education*, *understanding*, and *action*. The educational mission embraced by a university attuned to the needs of transition would centre on the cultivation of informed and thoughtful global citizens. Its core undergraduate curricula doubtless would include transdisciplinary study of interacting and co-evolving social and ecological systems, placing unfolding planetary challenges and visions in a holistic, historical context. New graduate programmes would prepare a new generation of sustainability professionals for understanding and managing complex socio-ecological systems.

Correspondingly, research and scholarship would highlight building the knowledge foundations for the transition, in particular, integrated assessment of global dynamics, cultural change, and institutional design. The transition to modernity brought a powerful scientific revolution rooted in reductionist epistemology and mechanistic models, and with it compartmental disciplines and an approach to knowledge based on analysis and deconstruction of complex systems. *Great Transitions* promises an equally significant intellectual adventure toward more integrative modes of understanding, of complex, nested systems that display emergent characteristics irreducible to the properties of subsystems (Schellnhuber et al., 2004). In these scenarios, emphasis shifts to the *systemic* (considering whole structures, reciprocal interactions, and cross-scale influences), *synthetic* (integrating biophysical, sociocultural, and ideational dimensions), *prospective* (taking a long view to capture delayed processes, deep uncertainties, and emerging developments), and *dynamic* (highlighting transformational shifts, co-evolution, and novel structures).

In addition to revising the way it pursues the core purposes of education and research, HE can advance the transition through its interactions with society. One channel is through a commitment to raise public awareness and debate on a new development paradigm that

highlights interdependence, the quality of life, and respect for the environment. Another is to advise governments on policies that flow from an integrated and long-range perspective. More indirect, but no less important, would be making universities centres of cosmopolitan ferment, both cultural and political, for a just and sustainable future. Such a unified agenda of education, research, and action would go a long way toward resolving the debate about the purpose of education between advocates of 'excellence' and 'relevance' that first raged in the 1960s (Toulmin, 1990). The soaring intellectual challenge of creating knowledge, pedagogy, and engagement for the transition would align the twin desiderata of advancing cutting-edge scholarship and human good.

With the winds of historical change blowing hard at our backs, the time of choice has arrived. HE can be borne compliantly to its dubious fate or act with foresight to renew itself and society for the planetary age. On the journey into a portentous future, the mere passenger's passive question – Where we are going? – lacks substance and purpose, for no pilot or navigator stands ready to answer. Rather, with urgency and determination, let us pose the traveller's questions of vision and engagement: Where do we want to go? How do we get there? The very meaning of the humanistic university in this unsettled century hangs on the answers.

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NOTE

- 1 For details, see the literature gathered at www.GTInitiative.org, the website of the Great Transition Initiative, an international network of scholars and activists.